

SWN 1924

Figure 1 displays 12 line drawings of the dorsal view of the carapace of various shrimp species. The drawings are arranged in two columns of six. Each drawing is labeled with a number (1-12) and the species name. The species names are: 1. *Stomatopoda*, 2. *Stomatopoda*, 3. *Stomatopoda*, 4. *Stomatopoda*, 5. *Stomatopoda*, 6. *Stomatopoda*, 7. *Stomatopoda*, 8. *Stomatopoda*, 9. *Stomatopoda*, 10. *Stomatopoda*, 11. *Stomatopoda*, 12. *Stomatopoda*.

4. The method of claim 1, wherein each path includes an adaptor in a computer and an interface port in the device, wherein determining the number of components the proposed path has in common with existing paths further comprises determining a number of components the adaptor in the proposed path shares with the adaptors of existing paths to the device and determining a number of components the proposed path shares with the interface ports of existing paths to the device.

1 5. The method of claim 4, wherein each path further includes a source port
2 and destination port on a switch, wherein the adaptor for a path connects to the source
3 port of the switch and wherein the interface port for the path connects to the destination
4 port of the switch, wherein determining the number of components the proposed path has
5 in common with existing paths further comprises determining components on the switch
6 the proposed path has in common with existing paths.

1 6. The method of claim 5, wherein determining components on the switch
2 the proposed path has in common with existing paths further comprises:
3 determining whether the proposed path and each existing path use the same
4 switch;
5 determining whether the source port of the proposed path is in a port card
6 including the source or destination port of any of the existing paths; and
7 determining whether the destination port of the proposed path is in a port card
8 including the source or destination port of any of the existing paths.

1 7. The method of claim 4, wherein the device comprises a control unit
2 providing access to a storage space, and wherein each proposed path connects one adaptor
3 in the computer with one interface port in the control unit.

1 8. The method of claim 1, further comprising:
2 maintaining an availability index for each proposed path;
3 incrementing the availability index for each component the proposed path and
4 each existing path share, wherein the availability index is used to select the proposed
5 path.

1 9. A system for selecting one of multiple proposed paths to a device,
2 comprising:
3 means for determining, for each proposed path, a number of components the
4 proposed path shares with existing paths to the device, wherein the components comprise
5 points of failure such that if one component fails then the paths including the component
6 fails; and
7 means for using the determined number of shared components for each proposed
8 path to select one proposed path.

1 10. The system of claim 9, wherein the means for using the determined
2 number of shared components to select one proposed path comprises means for selecting
3 the proposed path having a least number of shared components with existing paths, and
4 wherein the selected proposed path is selected to provide an additional path to the device.

1 11. The system of claim 9, wherein the means for using the determined
2 number of shared components to select one proposed path comprises means for selecting
3 the proposed path having a greatest number of shared components with existing paths,
4 wherein each proposed path comprises one existing path to the device, and wherein the
5 selected proposed path is selected to be removed as one of the paths to the device.

1 12. The system of claim 9, wherein each path includes an adaptor in a
2 computer and an interface port in the device, wherein the means for determining the
3 number of components the proposed path has in common with existing paths further
4 comprises means for determining a number of components the adaptor in the proposed
5 path shares with the adaptors of existing paths to the device and determining a number of
6 components the proposed path shares with the interface ports of existing paths to the
7 device.

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1 13. The system of claim 9, wherein each path further includes a source port
2 and destination port on a switch, wherein the host adaptor for a path connects to the
3 source port of the switch and wherein the interface port for the path connects to the
4 destination port of the switch, wherein the means for determining the number of
5 components the proposed path has in common with existing paths further comprises
6 means for determining components on the switch the proposed path has in common with
7 existing paths.

1 14. The system of claim 13, wherein the means for determining components
2 on the switch the proposed path has in common with existing paths further comprises:
3 means for determining whether the proposed path and each existing path use the
4 same switch;
5 means for determining whether the source port of the proposed path is in a port
6 card including the source or destination port of any of the existing paths; and
7 means for determining whether the destination port of the proposed path is in a
8 port card including the source or destination port of any of the existing paths.

1 15. The system of claim 12, wherein the device comprises a control unit
2 providing access to a storage space, and wherein each proposed path connects one adaptor
3 in the computer with one interface port in the control unit.

1 16. The system of claim 9, further comprising:
2 means for maintaining an availability index for each proposed path;
3 means for incrementing the availability index for each component the proposed
4 path and each existing path share, wherein the availability index is used to select the
5 proposed path.

1 17. An article of manufacture for use in selecting one of multiple proposed
2 paths to a device, the article of manufacture comprising code embedded in a computer
3 readable medium capable of causing a processor to perform:

4 for each proposed path, determining a number of components the proposed path
5 shares with existing paths to the device, wherein the components comprise points of
6 failure such that if one component fails then the paths including the component fails; and

7 using the determined number of shared components for each proposed path to
8 select one proposed path.

1 18. The article of manufacture of claim 17, wherein using the determined
2 number of shared components to select one proposed path comprises selecting the
3 proposed path having a least number of shared components with existing paths, and
4 wherein the selected proposed path is selected to provide an additional path to the device.

1 19. The article of manufacture of claim 17, wherein using the determined
2 number of shared components to select one proposed path comprises selecting the
3 proposed path having a greatest number of shared components with existing paths,
4 wherein each proposed path comprises one existing path to the device, and wherein the
5 selected proposed path is selected to be removed as one of the paths to the device.

1 20. The article of manufacture of claim 17, wherein each path includes an
2 adaptor in a computer and an interface port in the device, wherein determining the
3 number of components the proposed path has in common with existing paths further
4 comprises determining a number of components the adaptor in the proposed path shares
5 with the adaptors of existing paths to the device and determining a number of components
6 the proposed path shares with the interface cards of existing paths to the device.

1 21. The article of manufacture of claim 20, wherein each path further includes
2 a source port and destination port on a switch, wherein the adaptor for a path connects to
3 the source port of the switch and wherein the interface port for the path connects to the
4 destination port of the switch, wherein determining the number of components the
5 proposed path has in common with existing paths further comprises determining
6 components on the switch the proposed path has in common with existing paths.

1 22. The article of manufacture of claim 21, wherein determining components
2 on the switch the proposed path has in common with existing paths further comprises
3 causing the processor to perform:

4 determining whether the proposed path and each existing path use the same
5 switch;

6 determining whether the source port of the proposed path is in a port card
7 including the source or destination port of any of the existing paths; and

8 determining whether the destination port of the proposed path is in a port card
9 including the source or destination port of any of the existing paths.

1 23. The article of manufacture of claim 20, wherein the device comprises a
2 control unit providing access to a storage space, and wherein each proposed path connects
3 one adaptor in the computer with one interface port in the control unit.

1 24. The article of manufacture of claim 19, wherein the code is further capable
2 of causing the processor to perform:

3 maintaining an availability index for each proposed path;

4 incrementing the availability index for each component the proposed path and
5 each existing path share, wherein the availability index is used to select the proposed
6 path.

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